

REMARKS

Claims 1-3, 17-19 and 23-25 are currently pending in the present application. Claims 1, 3, 17, 19, 23 and 25 are amended herein merely to clarify the subject matter to which they are directed. Support for the amendment to claims 1, 17 and 23 may be found, for example, on page 14, lines 10-12, and on page 14, line 27, through page 15, line 1, of the specification.

In the outstanding Office Action, the Examiner rejected claims 1-3 under 35 U.S.C. §101 as allegedly directed to non-statutory subject matter. The Examiner further rejected claims 1-3, 17-19 and 23-25 under 35 U.S.C. §101 as allegedly lacking patentable utility. The Examiner also rejected claims 1-3, 17-19 and 23-25 under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement.

The present invention has been described in Applicants' prior response, incorporated by reference herein.

FORMAL REJECTIONS

As mentioned above, the Examiner rejected claims 1-3 under 35 U.S.C. §101 as allegedly directed to non-statutory subject matter. Applicants respectfully disagree with the Examiner's rejections. Notwithstanding this traversal of the rejections, Applicants have made clarifying amendments to claim 1. Reconsideration and withdrawal of the rejection of claim 1, and claims 2-3 dependent thereon, is respectfully requested.

Further, Applicants point out that the subject matter recited in claim 1 fully complies with the requirements of 35 U.S.C. §101.

The Supreme Court has stated that the "[t]ransformation and reduction of an article 'to a different state or thing' is the clue to patentability of a process claim." *Gottshalk v. Benson*, 409 U.S. 63, 70, 175 U.S.P.Q. (BNA) 676 (1972). In other words, claims that require some kind of transformation of subject matter, which has been held to include intangible subject matter, such as data or signals, that are representative of or constitute physical activity or objects have been held to comply with §101. See, for example, *In re Warmerdam*, 31 U.S.P.Q.2d (BNA)

1754, 1759 n.5 (Fed. Cir. 1994) or *In re Schrader*, 22 F.3d 290, 295, 30 U.S.P.Q.2d (BNA) 1455, 1459 n.12 (Fed. Cir. 1994).

Claim 1, recites, in part, that a transformation transforms a plurality of gene expression signals into a uniform distribution of transformed gene expression signals. As such, claim 1 clearly involves a transformation of subject matter, e.g., the plurality of gene expression signals into a uniform distribution of transformed gene expression signals. Thus, for at least this reason alone, Applicants respectfully submit that claim 1 is in full compliance with 35 U.S.C. §101, and accordingly, respectfully request that the rejections under 35 U.S.C. §101 be withdrawn.

Further, in response to the Examiner's assertions that claims 1-3 do not meet the standard of being immediately useful (see, Office Action, page 3, 1st paragraph), Applicants point out that claim 1, from which claims 2-3 depend, recites a method, the outcome of which is clearly immediately useful. For example, claim 1 recites, in part, that the uniform distribution of transformed gene expression signals may be used to determine gene expression patterns.

As highlighted above, the Examiner further rejected claims 1-3, 17-19 and 23-25 under 35 U.S.C. §101 as allegedly lacking patentable utility. In the Office Action, page 5, 2nd paragraph, the Examiner stated that "[t]he claimed method simply converts signals to a uniform distribution, without any further steps for an immediately useful application."

Applicants respectfully disagree with the Examiner's rejections. Notwithstanding this traversal of the rejections, Applicants have made clarifying amendments to claims 1, 17 and 23, from which claims 2-3, 18-19 and 24-25 respectively depend. Reconsideration and withdrawal of the rejections is respectfully requested.

As highlighted above, the Examiner also rejected claims 1-3, 17-19 and 23-25 under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement. Applicants respectfully disagree with the Examiner's assertions. Notwithstanding this traversal of the rejections, Applicants have made clarifying amendments to claim 1 (from which claim 2 depends), claim 3, claim 17 (from which claim 18 depends), claim 19, claim 23 (from which claim 24 depends) and claim 25. Reconsideration and withdrawal of the rejections is respectfully requested.

In view of the foregoing, Applicants submit that all of the pending claims, i.e., claims 1-3, 17-19 and 23-25, are in condition for allowance and such favorable action is earnestly solicited.

5 If any outstanding issues remain, or if the Examiner has any further suggestions for expediting allowance of this application, the Examiner is invited to contact the undersigned at the telephone number indicated below.

The Examiner's attention to this matter is appreciated.

Respectfully submitted,

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